

FIGURE 1

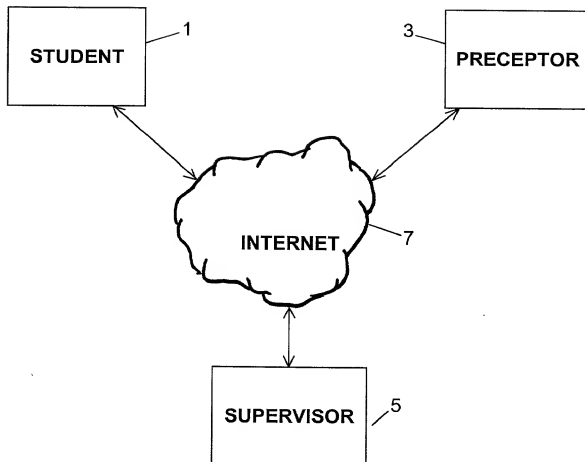


FIGURE 2

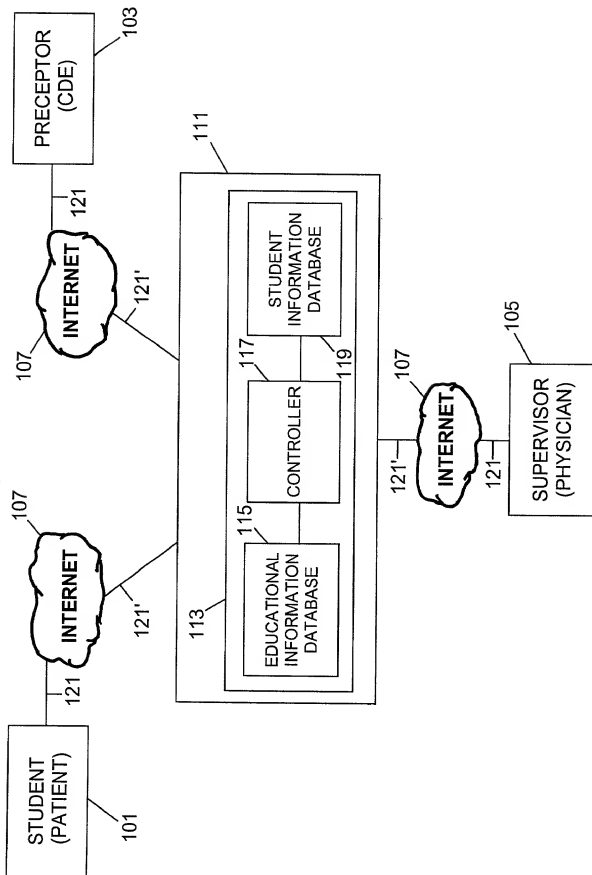


FIGURE 3

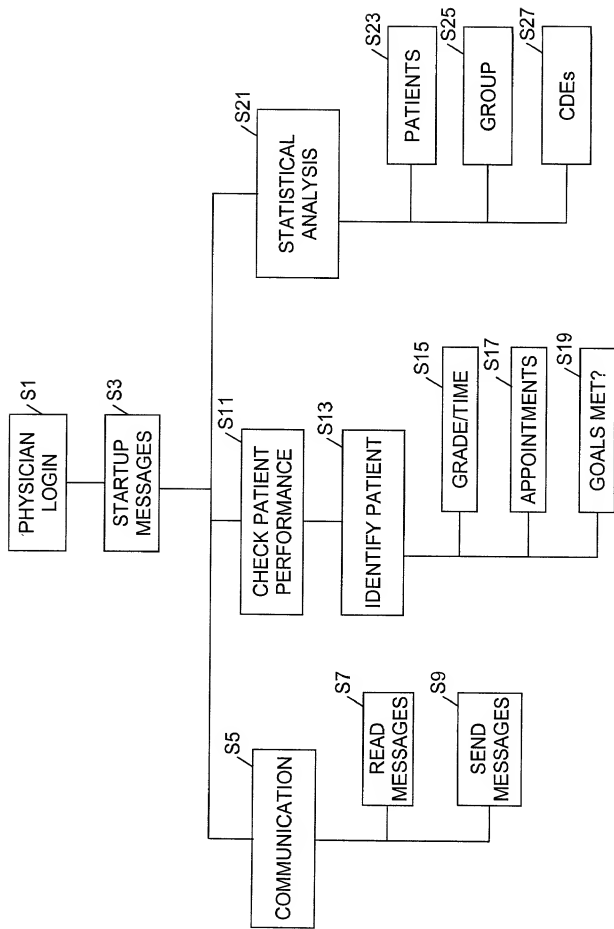


FIGURE 4

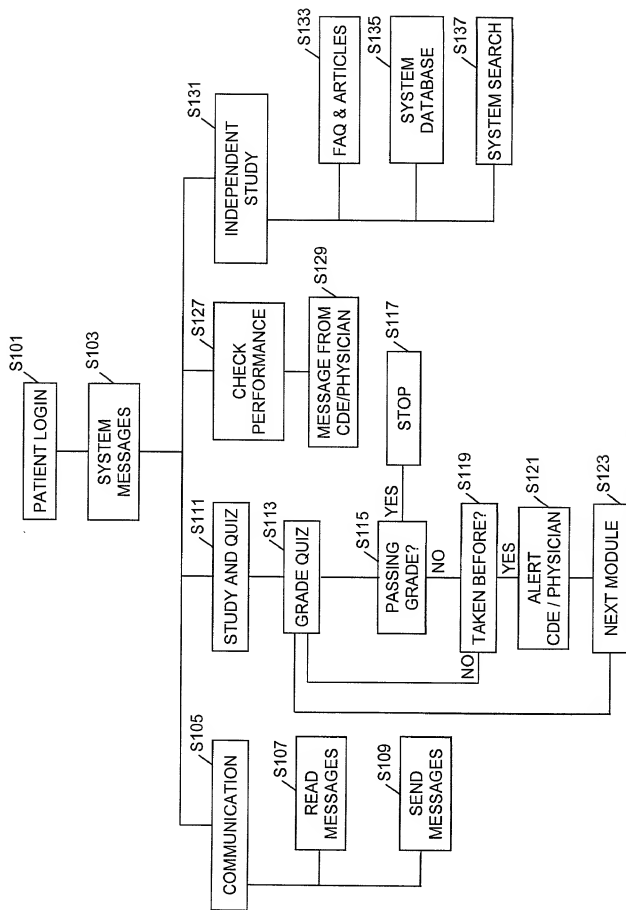


FIGURE 5

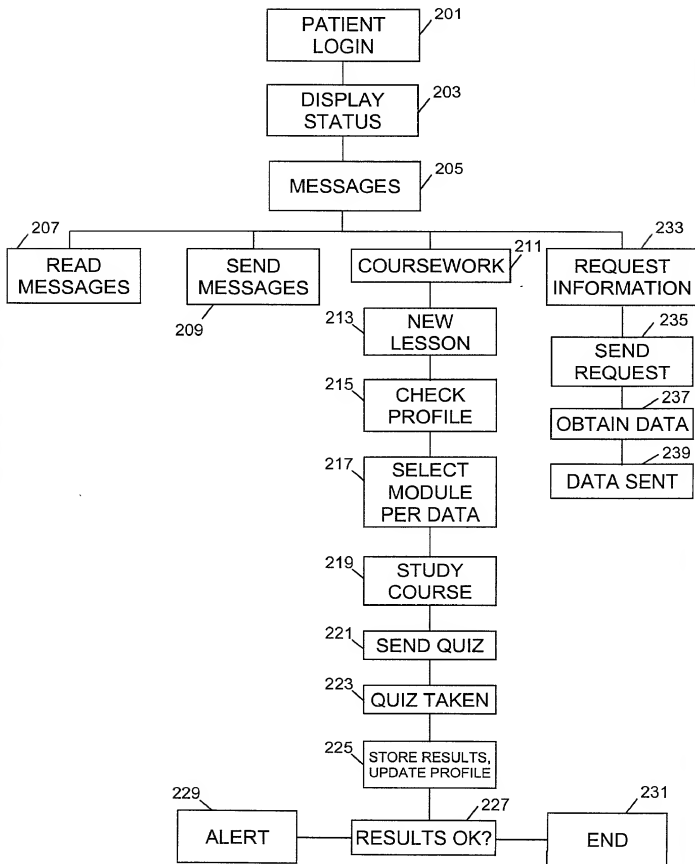
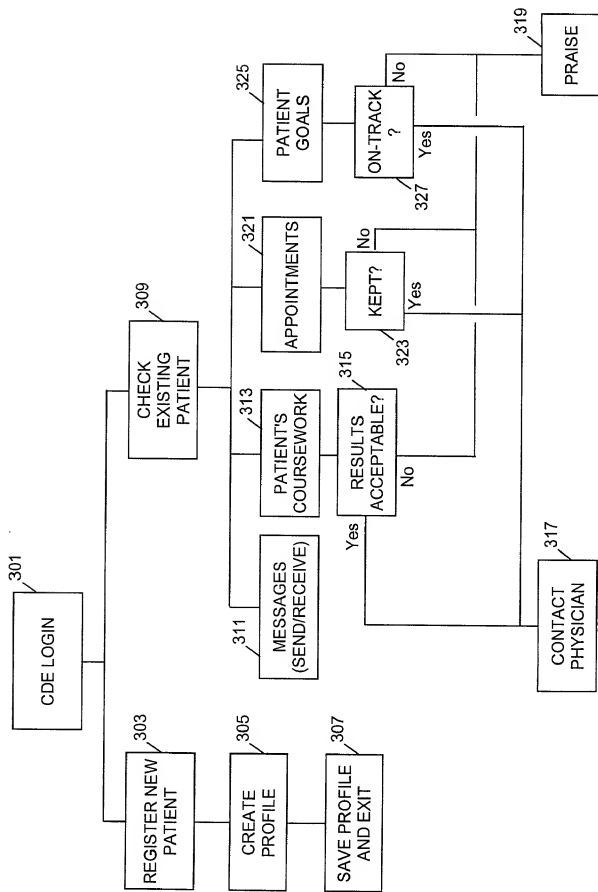


FIGURE 6



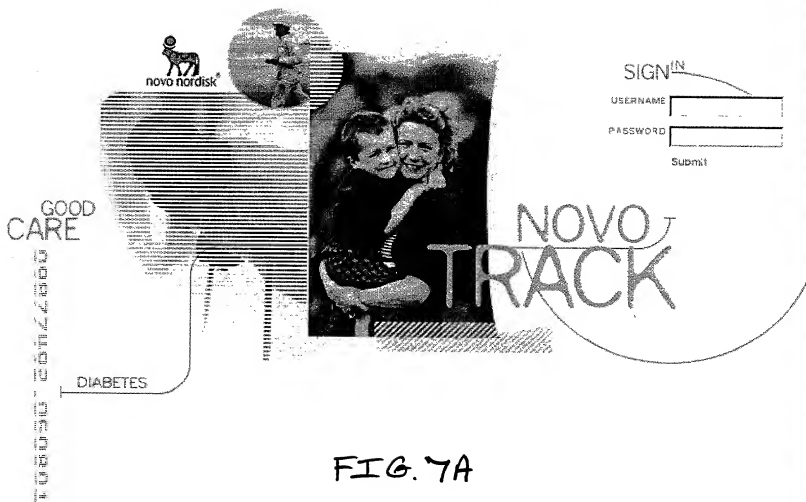


FIG. 7A



NOVO TRACK

TRACK

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1 2 3 4 5 6 7

GUIDE TO GOOD CARE



PERSONAL SCORECARD

Get instant access
to vital info about
your diabetes from
your primary care
provider.



MESSAGE CENTER

Post a message to a
CDE who can answer
your questions about
diabetes.



Welcome to NovoTrack - your program to good diabetes care!

This program was designed for you. You will find what you need to know about diabetes in the Guide to Good Care, Personal Scorecard and Message Center.

Guide to Good Care is a course in 7 tracks with 35 topics that were chosen to fit you and your diabetes. We recommend that you start at the beginning, but you can start anywhere and complete the topics in any order. Remember to answer the questions after reading each topic. You can reach the course by selecting a numbered button at the top of this page.

Personal Scorecard gives you access to vital information about your diabetes from your primary care provider. Explanations of each test help you to understand where you are now and where you should be going to reach the goals of good diabetes care. The Personal Scorecard can be reached from this homepage on the right or from the BioBox on the left of each page.

Message Center is a secure way to send messages to a nurse in your physician's office who can find answers to your questions about diabetes. The nurse will be following your progress through the Guide to Good Care. Remember that you and your physician make all the decisions about your individual medical care. Message Center can be reached from this homepage on the right or from the BioBox on the left of each page.

You can reach this homepage at any time by clicking on "NovoTrack" in the upper left corner or the "Home" menu item at the top of each page.

Now you are ready to get your diabetes on track - NovoTrack!

FIG. 7B



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TRACK



NOVO
TRACK

TRACK 2

WHAT IS
DIABETES?

Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5 %
Next Appointment
04/20/01
NovoTrack Progress
37 of 35 topics
completed
Message Center - 0

This section explains how your body works and what happened when you got diabetes.

Before you had diabetes, your body automatically made adjustments to keep your blood glucose at just the right level. Now that you have diabetes, you have to think about it. You have to make decisions that your body once made for you.

This section will tell you how your body worked before you had diabetes and how it works now.

Topics:

Before You Had
Diabetes

What Causes Diabetes

Effects of Diabetes

Who Gets Diabetes

NEXT

FIG. 7C



NOVO TRACK

Ralf Ackermann
Personal Scorecard
Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5 %
Next Appointment
04/20/01
NovoTrack Progress
38 of 35 topics
completed
Message Center - 0

FAQS | Glossary | Credits | Legal | Home

TRACK



TRACK 2

WHAT IS DIABETES?

FIG. 7D(1)

Effects of Diabetes

A Healthy Life

People with diabetes can live long and active lives. Knowing how to treat your diabetes can help you avoid the symptoms of high and low blood glucose. Maintaining good diabetes control over time reduces the risk of long term complications.

No one would want to have diabetes, but those who rise to the challenge of good diabetes care may find strengths that they never knew they had.

High Blood Glucose

Both high and low blood glucose can cause symptoms that go away after the blood glucose returns to an acceptable level. In rare circumstances, extremes of either high or low blood glucose can lead to coma with results that may not be easy to reverse.

The symptoms of a very high blood glucose are thirst, excessive urination, fatigue, weakness and loss of weight. Other symptoms can occur including blurring of vision and difficulty healing wounds or fighting infections.

When your blood glucose is very high, the body can flush some of the excess blood glucose out of your system by putting it into the urine. You get thirsty as your body loses more and more water in the sugary urine. Frequent trips to the toilet can disturb sleep and interrupt activities during the day.

If a high blood glucose is left untreated, you can begin to lose weight. The weight you lose is not a healthy weight loss. Even though the blood glucose is high, the glucose can't get into the cells so the cells don't get the energy they need to do their work. Muscle is being broken down to make even more glucose. This results in weakness and fatigue.

At a certain level of blood glucose, the brain cannot function well. The most severe consequences of an extremely high blood glucose are confusion and eventually coma. These complications can be prevented by the most basic diabetes care.

Low Blood Glucose

Low blood glucose is usually the result of treatment that is not matched to a person's needs. This topic is covered extensively in Section 2 Using Medications Wisely.

Long-Term Complications

The complications of diabetes are not inevitable. High blood glucose can damage many different organs in your body. How diabetes damages an organ is complex and not completely understood even by scientists who study these problems. It has been shown by a number of studies that maintaining good control of blood glucose reduces the risk of complications. Control of other risks such as high blood pressure and cholesterol can also reduce the risk of complications.



People can live long and healthy lives with diabetes.



Thirst, excessive urination and other symptoms of diabetes do not occur until the blood glucose levels are extremely high.



Loss of vision (and other long term complications) can be prevented by good diabetes care.



Weight loss because of

Each of the major complications of diabetes is discussed at greater length in Track 6 Complications.

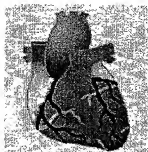
Heart Disease

You may not think of a heart attack as a complication of diabetes - but it is! People with diabetes are at greater risk of diseases caused by cholesterol that builds up and blocks vital arteries. People without diabetes can get blockage in an artery leading to a heart attack, stroke or other circulatory complication. Diabetes just makes all of these complications worse.

Fortunately, various treatments have been shown to reduce the risk of heart disease and other circulatory problems for people with diabetes. You can learn more about this subject in Track 4 Treating High Blood Pressure and Treating High Cholesterol and in Track 6 Heart Disease.

Go To Questions

high blood glucose is not healthy. A large part of the weight loss is muscle - with weakness and fatigue as a result.



Diabetes increases the risk of heart disease. Good diabetes care reduces the risk.

SEE HOW
IT WORKS!

FIG. 7D(2)





NOVO TRACK

TRACK

1 2 3 4 5 6 7

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TRACK 2

WHAT IS DIABETES?

☒ Frequent urination is always a symptom of diabetes.

- ☐ True
☐ False

[Back to Track 2.3](#)

[NEXT](#)



FIG. 7E



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TRACK



NOVO
TRACK



PERSONAL
SCORECARD

Ralf Ackermann
Personal Scorecard

Physician
Geoffrey Gates, MD
Diabetes Control
A1c 7.5 %
Next Appointment
04/20/01
NovoTrack Progress
37 of 35 topics
completed
Message Center - 0

How Am I Doing?

This is a good question to ask. Your personal scorecard helps you to answer this question.

Each of the test results to the right of this page has been selected with a purpose. Click on the test result to see an explanation of the test and its significance to your health.

Each test predicts the risk of one or more of the long-term complications of diabetes. For each test, treatment that moves the value toward the recommended goal is beneficial.

Not everyone can achieve the goals set by the American Diabetes Association and others. For some, these recommendations are not appropriate due to other medical concerns. You and your healthcare provider will need to decide goals that are appropriate for you. You can record these values by clicking the Personal Diabetes Goals at the bottom of the column to your right.

Personal Care

Personal Goals
Blood Glucose Testing
Average 7 per week

Laboratory Tests

Diabetes Control
A1c 7.5 %
Kidney Health
Urine albumin 532
Cholesterol Profile
Total cholesterol - 211
HDL cholesterol - 40
LDL cholesterol - 110
Triglycerides - 346

Physical Examination

Weight/BMI
150 lbs/32
Blood Pressure
160/100
Foot Sensitivity
sensitive
Eye Examination
10/25/01

FIG. 7F

CDE - Microsoft Internet Explorer

RACE CDE CONSOLE
A CLINICAL USE ONLY

Profile | Messages | Appointments | Clinical Alerts | Usage

User Name: Inactive: ☐

Password: Confirm Password:

CDE: Registration Date: 11/13/00

First Name: Last Name:

Address:

City: State: Zip Code:

Phone: Email:

Medical/Goals | Reg. Questions | Track Progress | Appt Goals | Alerts

FIG. 7H

00077002-060001

100 - Microsoft Internet Explorer

RAG CDE CONSOLE

Profile | Measurements | Laboratory | Clinical | History | Alerts

Patient: Ralf Ackermann

1. Subjective Duration of Diabetes
Established patterns

2. Attitude Toward Future Complications
Fatalistic

3. Level of Activity
Sedentary

4. Frequency of Blood Sugar Monitoring
Infrequent

5. Attitude Toward Smoking
Smoker does not want to quit

6. Attitude Toward Insulin
Type 2 rejects

Save Cancel RAGGER KEY

FIG. 7J

CDE - Microsoft Internet Explorer

CDE CONSOLE

Profile: **Richard L. Smith** | **Dr. Richard L. Smith** | **Dr. Richard L. Smith** | **Dr. Richard L. Smith**

SSC

Patient: **Ralf Ackermann**

| Topic # | Topic | Date Completed | Minutes | Questions Correct |
|---------|-------------------------------|----------------|---------|-------------------|
| 5.4 | Asking for Help | 05/09/01 | 1 | 0 of 3 |
| 1.4b | Proof That Good Care Matters | 05/14/01 | 1 | 3 of 3 |
| 5.1b | A Healthy Attitude | 03/16/01 | 30 | 2 of 3 |
| 4.1b | How Diabetes Medications Work | 03/29/01 | 7 | 0 of 3 |
| 6.5b | Treating Heart Disease | 11/20/00 | 2 | 3 of 3 |
| 2.2b | What Causes Diabetes | 03/29/01 | 20 | 2 of 3 |
| 2.7 | Dental Care | 05/09/01 | 2 | 0 of 3 |
| 4.4b | Hypoglycemia | 03/29/01 | 1 | 0 of 3 |
| 4.7 | Treating High Blood Pressure | 03/29/01 | 2 | 0 of 3 |
| 4.6 | Treating High Cholesterol | 05/17/01 | 23 | 3 of 3 |
| 6.1a | Preventing Retinopathy | 05/09/01 | 2 | 0 of 3 |
| 6.4b | Foot Care | 05/09/01 | 0 | 0 of 3 |

FIG. 7K

2 CDE - Microsoft Internet Explorer

TRACK CDE CONSOLE

| Profile | ICD-9 Code | Appointment | Comments |
|---------|------------|-------------|----------|
|---------|------------|-------------|----------|

Patient: Ralf Ackermann

Physician

Date of last Physician Appointment: 10/10/00

Next Physician Appointment Goal: 4/20/01

Actual Physician Appointment: 4/20/01

**NOTE: Dates must be entered in the following format: m/d/yy or mm/dd/yyyy*

Ophthalmologist

Date of last Ophthalmologist Appointment: 1/4/00

Next Ophthalmologist Appointment Goal: 1/4/01

Actual Ophthalmologist Appointment: 10/25/01

**NOTE: Dates must be entered in the following format: m/d/yy or mm/dd/yyyy*

Save Cancel

FIG. 7L

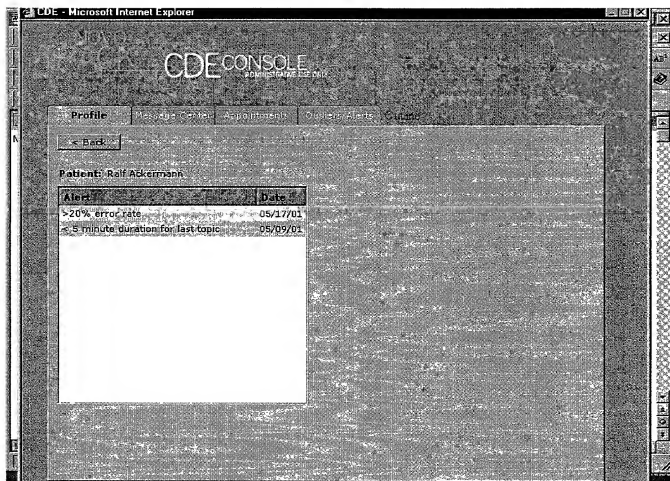


FIG. 7M

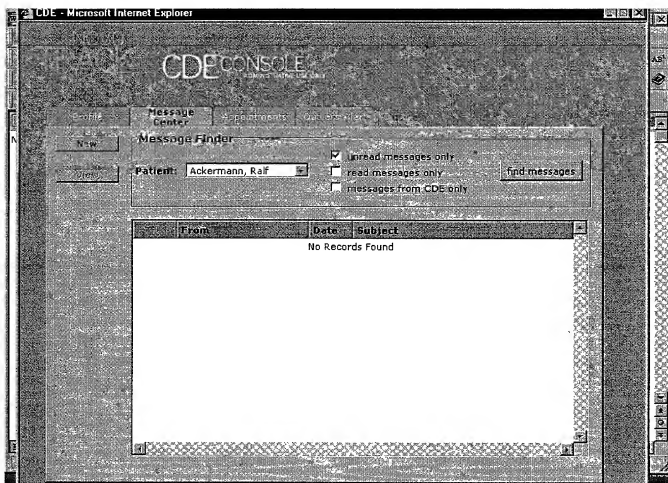


FIG. 7N

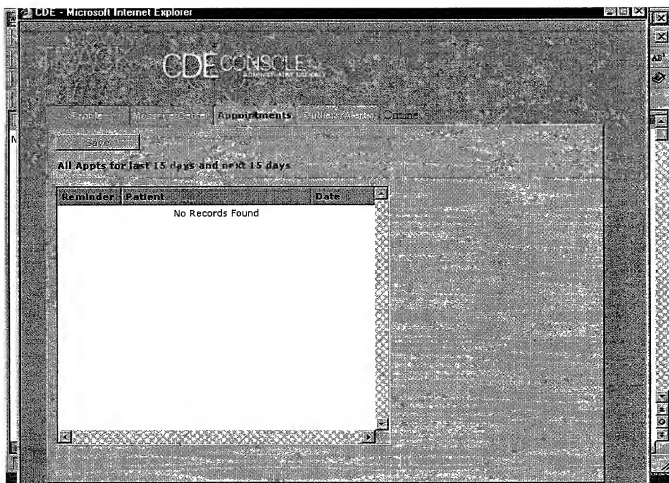


FIG. 70

00077402 - 05/08/01

CDE - Microsoft Internet Explorer

TRACK CDE CONSOLE

Home Monitoring Center Appointments Outliers/Alerts Clinical

All Alerts for the last 10 days

| Patient | Alert Code | Date |
|-----------------|------------------------------------|----------|
| Ackermann, Ralf | >20% error rate | 05/17/01 |
| Ackermann, Ralf | < 5 minute duration for test topic | 05/09/01 |

FIG. 7P

FIG. 8A

NovoTrack Guide To Good Care Outline

Key

0.0e Title of the Topic Medical Record Data Patient Attitude Data Questions
Numbering sequence is by track, then topic. Note that a letter after the number indicates a choice of article for that topic depending on patient characteristics entered by the patient in response to questions at the time of registration. Both the CDE and patient can edit data if required.

Track 1 - Getting Good Care (4 articles: This section has 1 **Medical Record** choice and 1 **Patient Attitude** response at registration to choose perspective for the articles.)

| | | | |
|------|------------------------------|----------------------|-----------|
| 1.1 | Defining Quality Care | | Questions |
| 1.2a | Caring for Yourself | New Diagnosis | Questions |
| 1.2b | Caring for Yourself | Established Patterns | Questions |
| 1.3 | Your Diabetes Care Team | | Questions |
| 1.4a | Proof that Good Care Matters | Type 1 | Questions |
| 1.4b | Proof that Good Care Matters | Type 2 | Questions |

Track 2 - What is Diabetes (4 articles: This section has 1 **Medical Record** choice at registration to choose perspective for the articles.)

| | | | |
|------|-------------------------|--------|-----------|
| 2.1 | Before You Had Diabetes | | Questions |
| 2.2a | What Causes Diabetes | Type 1 | Questions |
| 2.2b | What Causes Diabetes | Type 2 | Questions |
| 2.3a | Effects of Diabetes | Type 1 | Questions |
| 2.3b | Effects of Diabetes | Type 2 | Questions |
| 2.4a | Who Gets Diabetes | Type 1 | Questions |
| 2.4b | Who Gets Diabetes | Type 2 | Questions |

Track 3 - Healthy Eating & Exercise (2 articles: This section has 2 **Medical Record** choices and 1 **Patient Attitude** response at registration to choose perspective for the articles.)

| | | | |
|------|------------------|---------------------|-----------|
| 3.1a | Healthy Eating | Type 1 | Questions |
| 3.1b | Healthy Eating | Type 2 BMI < 28 | Questions |
| 3.1c | Healthy Eating | Type 2 BMI > 28 | Questions |
| 3.2a | Healthy Exercise | Type 1 Sedentary | Questions |
| 3.2b | Healthy Exercise | Type 1 Active | Questions |
| 3.2c | Healthy Exercise | Type 1 Disabled | Questions |
| 3.2d | Healthy Exercise | Type 2 Sedentary | Questions |
| 3.2e | Healthy Exercise | Type 2 Active | Questions |
| 3.2f | Healthy Exercise | Type 2 Disabled | Questions |

Track 4 - Using Medications Wisely (8 articles: This section has 1 **Medical Record** choice and 2 **Patient Attitude** responses at registration to choose perspective for the articles.)

FIG. 8B

| | | | | |
|------|--------------------------------|--------|-----------------------|-----------|
| 4.1a | Choosing The Right Insulin | Type 1 | | Questions |
| 4.1b | How Diabetes Medications Work | Type 2 | | Questions |
| 4.2a | Intensive Insulin Therapy | Type 1 | | Questions |
| 4.2b | Combinations Of Medications | Type 2 | | Questions |
| 4.3a | Practical Tips For Insulin Use | Type 1 | | Questions |
| 4.3b | Insulin For Your Diabetes | Type 2 | Accepts Injections | Questions |
| 4.3c | Insulin For Your Diabetes | Type 2 | Rejects Injections | Questions |
| 4.4a | Hypoglycemia | Type 1 | | Questions |
| 4.4b | Hypoglycemia | Type 2 | | Questions |
| 4.5a | Monitoring Your Blood Sugar | Type 1 | Infrequent Monitoring | Questions |
| 4.5b | Monitoring Your Blood Sugar | Type 1 | Frequent Monitoring | Questions |
| 4.5c | Monitoring Your Blood Sugar | Type 2 | Infrequent Monitoring | Questions |
| 4.5d | Monitoring Your Blood Sugar | Type 2 | Frequent Monitoring | Questions |
| 4.6 | Treating High Cholesterol | | | Questions |
| 4.7 | Treating High Blood Pressure | | | Questions |
| 4.8 | Benefits of Aspirin | | | Questions |

Track 5 - Family, Friends & Feelings (4 articles: This section has 1 **Patient Attitude** response at registration to choose perspective for the articles.)

| | | | |
|------|--------------------|-------------|-----------|
| 5.1a | A Healthy Attitude | Optimistic | Questions |
| 5.1b | A Healthy Attitude | Balanced | Questions |
| 5.1c | A Healthy Attitude | Pessimistic | Questions |
| 5.2 | Setting Goals | | Questions |
| 5.3 | Family & Friends | | Questions |
| 5.4 | Getting Help | | Questions |

Track 6 - Complications (7 articles: This section has 5 **Medical Record** choices and 1 **Patient Attitude** response at registration to choose perspective for the articles.)

| | | | |
|------|--------------------------|------------------------|-----------|
| 6.1a | Preventing Retinopathy | Complication Absent | Questions |
| 6.1b | Treating Retinopathy | Complication Present | Questions |
| 6.2a | Preventing Neuropathy | Complication Absent | Questions |
| 6.2b | Treating Neuropathy | Complication Present | Questions |
| 6.3a | Preventing Nephropathy | Complication Absent | Questions |
| 6.3b | Treating Nephropathy | Complication Present | Questions |
| 6.4a | Foot Care | Low Risk | Questions |
| 6.4b | Foot Care | High Risk | Questions |
| 6.5a | Preventing Heart Disease | No Ischemia | Questions |
| 6.5b | Treating Heart Disease | Prior/Current Ischemia | Questions |

FIG. 8C

| | | | |
|------|-------------|------------------------------|-----------|
| 6.6a | Smoking | Nonsmoker | Questions |
| 6.6b | Smoking | Smokes - Wants to quit | Questions |
| 6.6c | Smoking | Smokes - Doesnt want to quit | Questions |
| 6.7 | Dental Care | | Questions |

Track 7 - Special Situations (5 articles: This section has 3 **Medical Record** choices at registration to choose perspective for the articles.)

| | | | |
|------|-------------------|------------------------|-----------|
| 7.1a | Driving | Type 1 | Questions |
| 7.1b | Driving | Type 2 | Questions |
| 7.2a | Traveling | Type 1 | Questions |
| 7.2b | Traveling | Type 2 | Questions |
| 7.3a | Employment | < 62 years old | Questions |
| 7.3b | Retirement | > 62 years old | Questions |
| 7.4a | Insurance | < 62 years old | Questions |
| 7.4b | Medicare | > 62 years old | Questions |
| 7.5a | Men's Sexuality | Male | Questions |
| 7.5b | Women's Sexuality | Female, < 45 years old | Questions |
| 7.5c | Women's Sexuality | Female, > 45 years old | Questions |
| 7.6a | Sick Days | Type 1 | Questions |
| 7.6b | Sick Days | Type 2 | Questions |

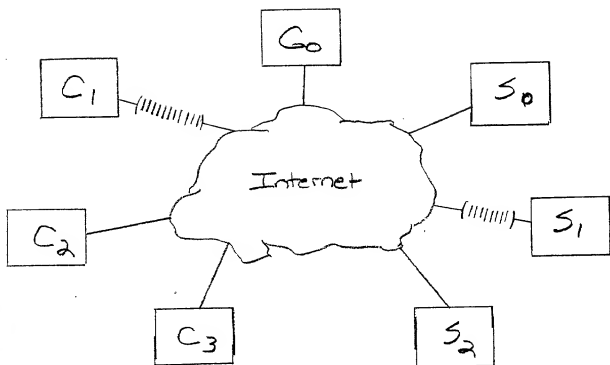


FIG. 9
PRIOR ART

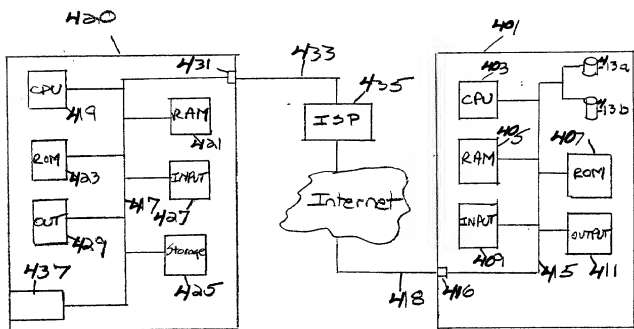


FIG. 10
PRIOR ART